

# Interview Summary

Application No.  
**09/760,085**

Applicant(s)  
**Goudsmit et al.**

Examiner  
**Joyce Tung**

Art Unit  
**1637**



All participants (applicant, applicant's representative, PTO personnel):

(1) Joyce Tung (3) \_\_\_\_\_  
(2) Karen A, Magir (4) \_\_\_\_\_

Date of Interview Sep 20, 2002

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy is given to 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No. If yes, brief description:

Claim(s) discussed: \_\_\_\_\_

Identification of prior art discussed: \_\_\_\_\_

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Examiner's amendment was authorized to cancel the claims 16-21 and 28-37 and amend claims 38 and 44 for allowance.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i) ☐ It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
Examiner's signature, if required

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### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Karen A. Magri on 9/20/2002.

2. The application has been amended as follows:

Cancel claims 16-21 and 28-37.

In claim 38, line 7, after "the solid phase", insert -- as compared with the single stranded nucleic acid --; line 10, after "a second liquid", insert -- comprising a second nucleic acid binding phase and contacting the supernatant with the second nucleic acid binding phase in the presence of --; line 12, before "a chaotropic agent", delete "comprising" and line 13, after "divalent positive ions", delete "and a second nucleic acid binding solid phase".

In claim 44, line 7, after "the solid phase", insert -- as compared with the single stranded nucleic acid --; line 10, after "a second liquid", insert -- comprising a second nucleic acid binding phase and contacting the supernatant with the second nucleic acid binding phase in the presence of --; line 12, before "a chaotropic", delete "comprising" and line 13, after "agent", delete "," and

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substitute therefore -- and --, after “divalent positive ions”, delete “and a second nucleic acid binding solid phase”.

3. The following is an examiner's statement of reasons for allowance:

No prior art has been found teaching or suggesting a method for separating single stranded nucleic acid from double stranded nucleic acid comprising the steps as follows:

contacting a mixture comprising both single stranded and double stranded nucleic acid with a first liquid comprising a chaotropic agent and a nucleic acid binding solid phase wherein the first liquid has a composition such that the double stranded nucleic acid binds to the solid phase;

separating the solid phase from a supernatant containing the single stranded nucleic acid and

treating the supernatant with a second liquid comprising a chaotropic agent and divalent positive ions and a second nucleic acid binding solid phase or a chaotropic agent, chelating agent and divalent positive ions and a second nucleic acid binding solid phase wherein the second liquid has composition such that the single stranded nucleic acid in the resulting mixture binds to the second solid phase, whereby the single stranded nucleic acid is isolated.

The closest prior art is the reference of Boom et al.. Boom et al. disclose a process for isolating nucleic acid from a nucleic acid-containing starting material (See the Abstract). Boom et al. provide the protocol B which is suitable for isolating dsDNA from complex starting materials (See pg. 14, lines 13-31) contains 900ul GEDTA (GEDTA is meant a solution of 120g

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GuSCN (Guanidine thiocyanate) in 100ml 0.2M EDTA pH=8) and 40ul silica particles is used (See pg. 14, lines 13-15) and the protocol Y which is for simultaneous purification of dsDNA, ssDNA and single or double stranded RNA comprises using buffer L6 and silica beads (See pg. 15, lines 2-6). The buffer L6 contains 120g GuSCN in 22 ml 0.2 M EDTA pH 8 (See pg. 12, lines 30-34). The method of Boom et al. does not involve two steps of purification as claimed to separate single stranded nucleic acid from double stranded nucleic acid. Furthermore, the buffer used in the method of Boom et al. does not contain a chaotropic agent, chelating agent and divalent positive ions or a chaotropic agent and divalent positive ions. Thus the instant invention is allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached at (703) 308-1119 on Monday-Friday from 10:00 AM-6:00 PM.

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Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

5. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1637 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

September 20, 2002